



April 30, 2003

Ms. Camille Hueni
Environmental Protection Agency
Superfund Division
1445 Ross Avenue
Mail Code 6SF-AP
Dallas, Texas 75202-2733

RECEIVED
2003 MAY -6 AM 9:01
AR/ON/TX BRANCH

**RE: Long-Term Operations and Maintenance Annual Report (Soil Remedy)
South Cavalcade Superfund Site – Concrete Cap**

Dear Ms. Hueni:

This letter and attachments serve as the 2002 Long-Term Operations and Maintenance Annual Report (Report) for the soil remedy of the South Cavalcade Site located in Houston, Texas. This report is submitted to the Environmental Protection Agency as required by the Remedial Action Work Plan for the South Cavalcade Site on behalf of Beazer East, Inc.

The intent of this Report is to describe the condition of the site, delineate operation and maintenance activities completed during the year, detail proposed activities for the next year, and certify that the remedy continues to provide the protection specified by the Amended Record of Decision (ROD) dated June 27, 1997. This protection includes providing a barrier protective of human health and the environment by removing exposure pathways.

Completed Maintenance Activities

Prior to the site visit, current property owners and site personnel were contacted to review maintenance activities that were performed during the past year as well as activities that are planned for the coming year. Property owners / lessees representatives that were contacted include the following:

Palletized Trucking Inc. – Mr. Mike King

American Warehouses Inc. – Mr. Tony Carter

Sullivan Transfer, Leasing property from Western Way Holdings a Colorado Company– Ms. Janet Starns

Retec (formerly Thermo Retec) – Mr. Vern McIlwain

Ms. Starns, of Sullivan Transfer, in a phone interview, indicated that no changes had occurred on the site from the previous year. Similarly, Vern McIlwain of Retec, the groundwater treatment plant operator was contacted for general site-wide operational information. Based on the phone interviews with current property owners representatives and Retec Inc., site maintenance and operational changes to the concrete capped area were limited and none of the maintenance activities performed affected the performance of the concrete cap as a remedial design.

Within the next year, it is anticipated that the City of Houston will extend a tollway in the vicinity of the site. According to design, this future activity is not anticipated to affect the existing cap.

URS Corporation
9801 Westheimer, Suite 500
Houston, TX 77042
Tel: 713.914.6699
Fax: 713.789.8404

9440250





Site Inspection and Proposed Maintenance Activities

A site inspection of the concrete cap was performed on November 22, 2002. As previously described, the current site owners and or representatives were contacted prior to the inspection and interviewed concerning the past year's operations and maintenance activities.

The condition of the concrete cap at the site in both the southeast and southwest areas is generally very good. No significant cracking (ie. cracking other than what is typically associated with curing) or spalling was observed. The joint systems appear to be primarily intact and functioning as designed. The attached photos are indicative of typical concrete cap conditions. Inspection of the exterior of on-site manholes and the stormwater detention basin was performed and the typical condition is depicted in the attached photos. Review of the interior of the stormwater inlets indicates that there has been some sediment buildup in the boxes but flow into the storm drainage pipes appears to be unobstructed.

Based on the results of the property owner conversations and the site inspection limited additional maintenance should be performed at the site. In several locations up to a foot of joint material in the southeast area has become dislodged. It was evident that additional joint sealant material had been placed throughout the cap, but locations were identified which continued to need repair. This minor maintenance issue will not affect the performance of the design remedy with respect to the ability provide the protection specified by the ROD. By copy of this letter report, the appropriate property owners are notified of this maintenance issue.

This letter serves to certify that the remedy continues to provide the protection specified by the ROD for the site.

If you have any questions or would like additional information concerning the site inspection please contact either Jennifer Thomas or Kristine Jarosz at 713-914-6699.

Sincerely,
URS Corp.

A handwritten signature in cursive script that reads "Kristine Jarosz".

Kristine Jarosz, P.E.
Project Engineer

Attachments

cc: James Sher, P.E. – TCEQ
Mike King – Palletized Trucking, Inc.
Tony Carter– American Warehouses, Inc.
Mike Bollinger – Beazer East, Inc.



SITE PHOTOGRAPHS

Project Name/ Client:
South Cavalcade Long-Term O&M
Annual Report

Site Location:
South Cavalcade

URS 18804-431-012

Photo No.
1

Date:
11-22-02

**Direction Photo
Taken:**

To the west.

Description:

Photo shows on-site tire shop and typical condition of cap pavement and joint system. In basin 4 of the southeast area at the approximate location of cap and pavement.



Photo No.
2

Date:
11-22-02

**Direction Photo
Taken:**

To the north.

Description:

Photo shows basin 4 of southeast area concrete and joints.





SITE PHOTOGRAPHS

Project Name/ Client:
South Cavalcade Long-Term O&M
Annual Report

Site Location:
South Cavalcade

URS 18804-431-012

Photo No.
3

Date:
11-22-02

**Direction Photo
Taken:**

Towards the east.

Description:

Basin 4 concrete cap and
joint. Photo also shows
typical use of cap in
southeast area.



Photo No.
4

Date:
11-22-02

**Direction Photo
Taken:**

Towards the north.

Description:

From basin 4 in southeast
area along existing
pavement and concrete
cap edge at ramp.





SITE PHOTOGRAPHS

Project Name/ Client:
South Cavalcade Long-Term O&M
Annual Report

Site Location:
South Cavalcade

URS 18804-431-012

Photo No.
5

Date:
11-22-02

**Direction Photo
Taken:**

Towards the west.

Description:

At basin 4 and 3 interface
along eastern property
line in southeast area.
Cap area shown is being
used for storage.



Photo No.
6

Date:
11-22-02

**Direction Photo
Taken:**

Towards the north.

Description:

At basin 3 in southeast
area along slope
pavement near property
line. Concrete is in good
condition.





SITE PHOTOGRAPHS

Project Name/ Client:
South Cavalcade Long-Term O&M
Annual Report

Site Location:
South Cavalcade

URS 18804-431-012

Photo No.
7

Date:
11-22-02

**Direction Photo
Taken:**

Towards the north.

Description:

Photo taken along slope
pavement in southeast
area at the existing utility
box location.



Photo No.
8

Date:
11-22-02

**Direction Photo
Taken:**

Towards the south.

Description:

From basin 3 in southeast
area along property line.
Photo shows slope
paving.





SITE PHOTOGRAPHS

Project Name/ Client:
South Cavalcade Long-Term O&M
Annual Report

Site Location:
South Cavalcade

URS 18804-431-012

Photo No.
9

Date:
11-22-02

**Direction Photo
Taken:**

Towards the south.

Description:

From basin 1 towards
basin 2 in southeast area
along the edge of existing
pavement and concrete
cap.

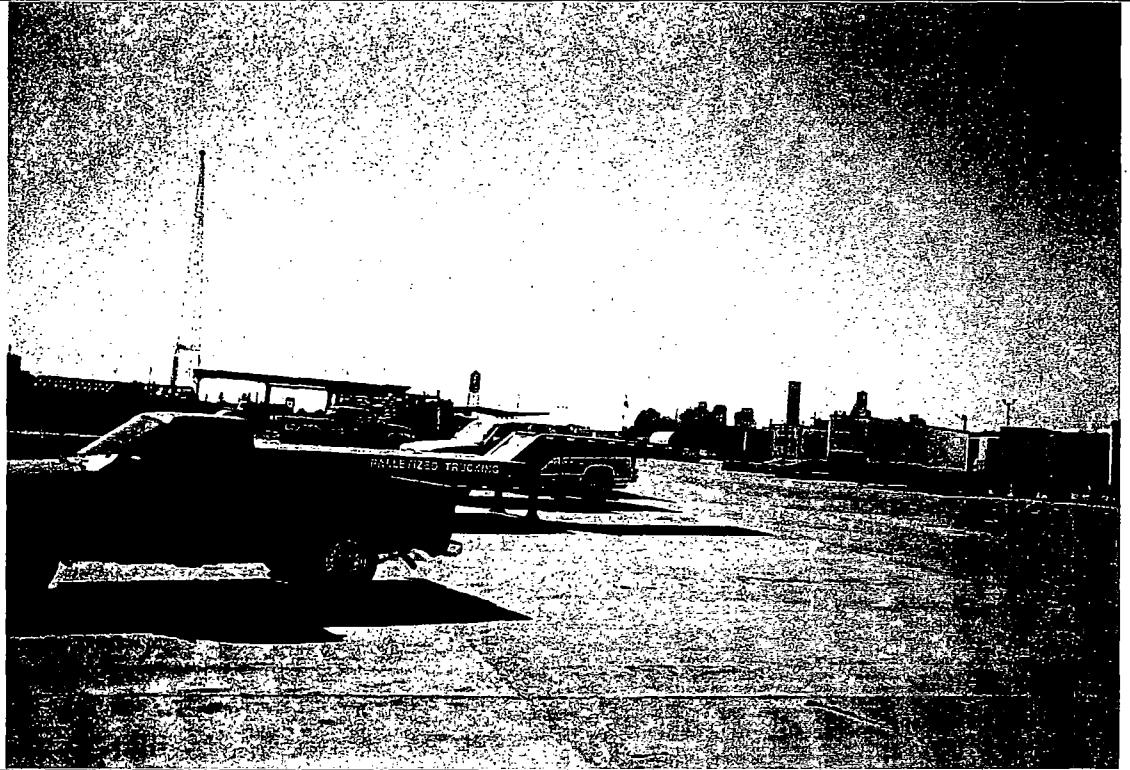


Photo No.
10

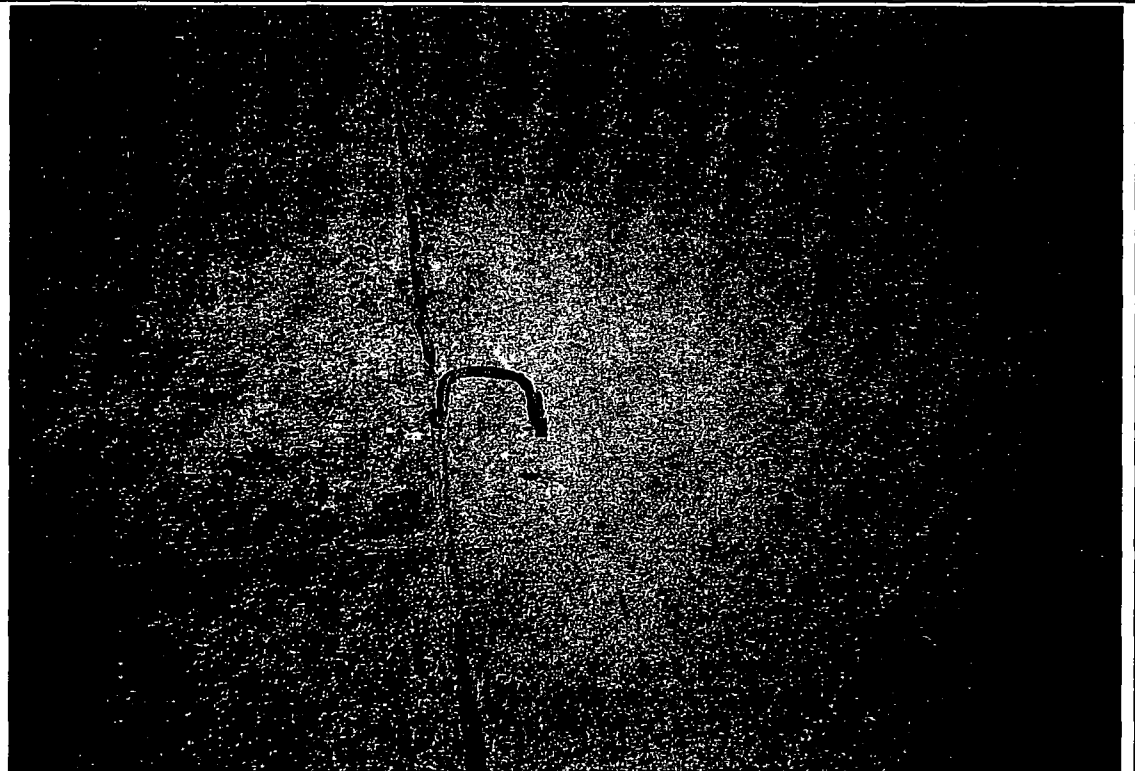
Date:
11-22-02

**Direction Photo
Taken:**

Towards the north.

Description:

Photo shows joint
between concrete cap and
previously existing
concrete pavement in
southeast area. The joint
material has detached and
come out of the joint.





SITE PHOTOGRAPHS

Project Name/ Client:
South Cavalcade Long-Term O&M
Annual Report

Site Location:
South Cavalcade

URS 18804-431-012

Photo No.
11

Date:
11-22-02

**Direction Photo
Taken:**

Towards inlet.

Description:

Photo shows typical
condition of stormwater
inlets and concrete joint
material surrounding
inlets.

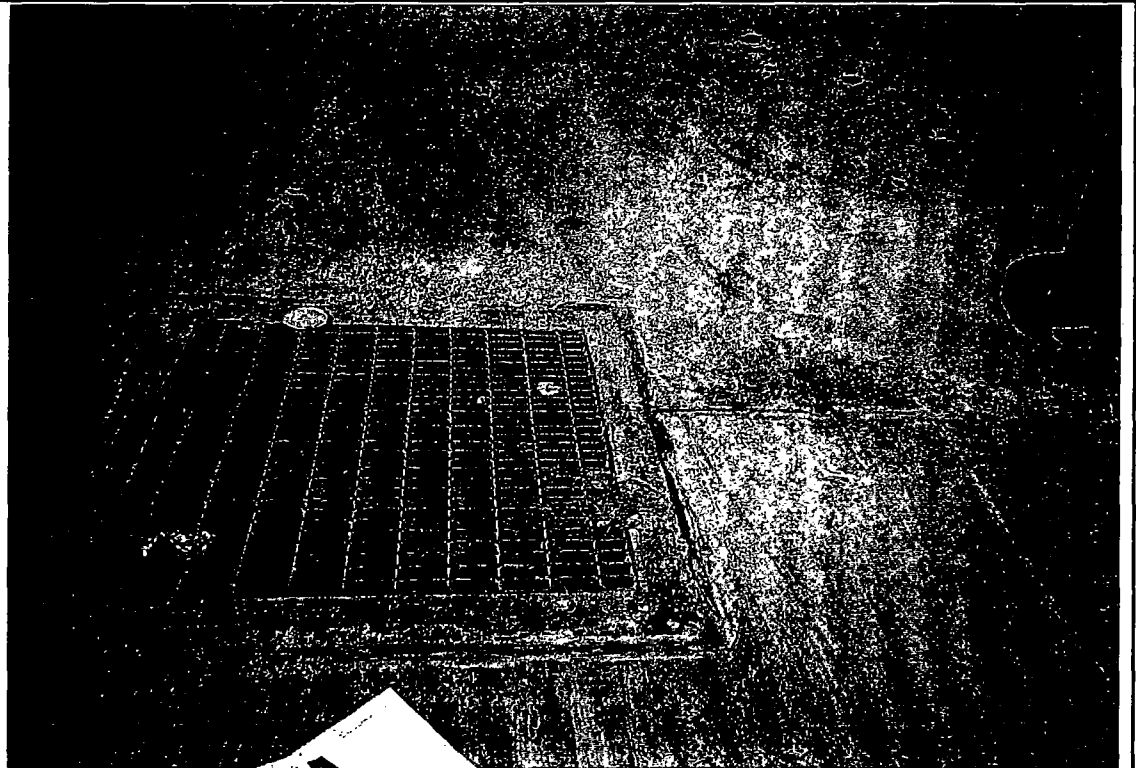


Photo No.
12

Date:
11-22-02

**Direction Photo
Taken:**

Towards the north.

Description:

From basin 2 towards
basin 1. In southeast area.
Photo shows stormwater
inlet and condition of
concrete cap (to the right).
Joint system appears to
be good repair.





SITE PHOTOGRAPHS

Project Name/ Client:
South Cavalcade Long-Term O&M
Annual Report

Site Location:
South Cavalcade

URS 18804-431-012

Photo No.
13

Date:
11-22-02

**Direction Photo
Taken:**

Towards the south.

Description:

From basin 3 towards
basin 4 in southeast area.
Photo shows concrete cap
and joint.

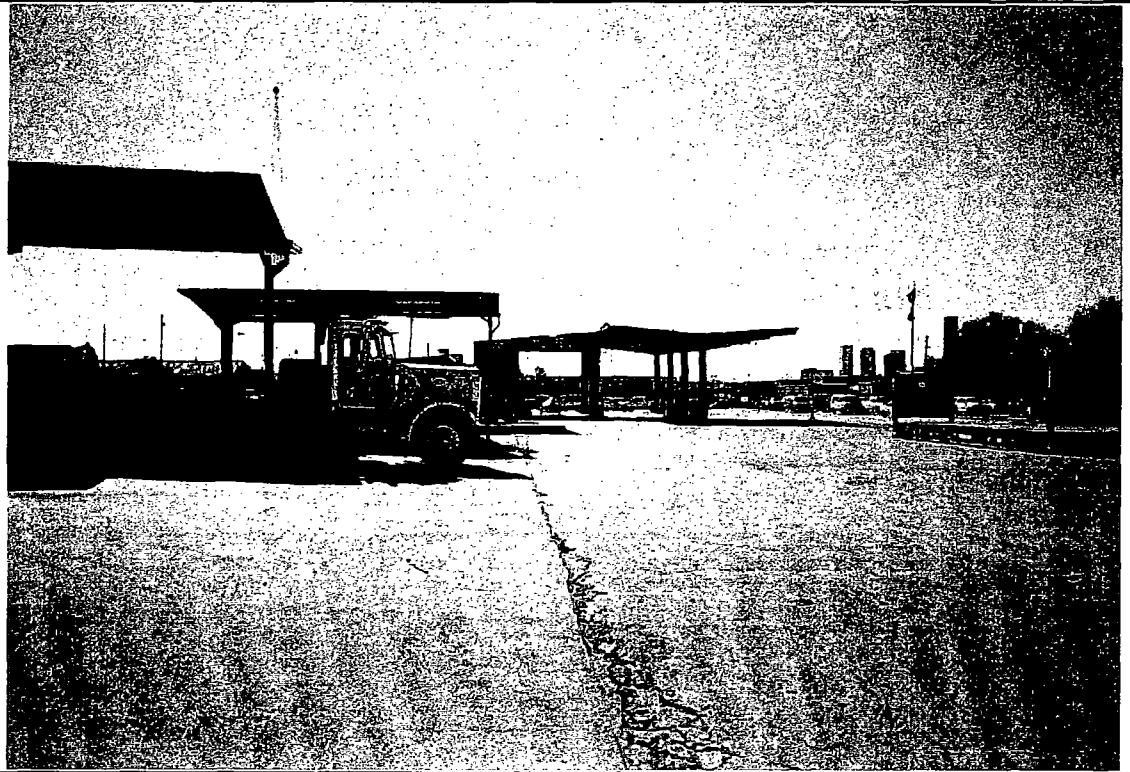


Photo No.
14

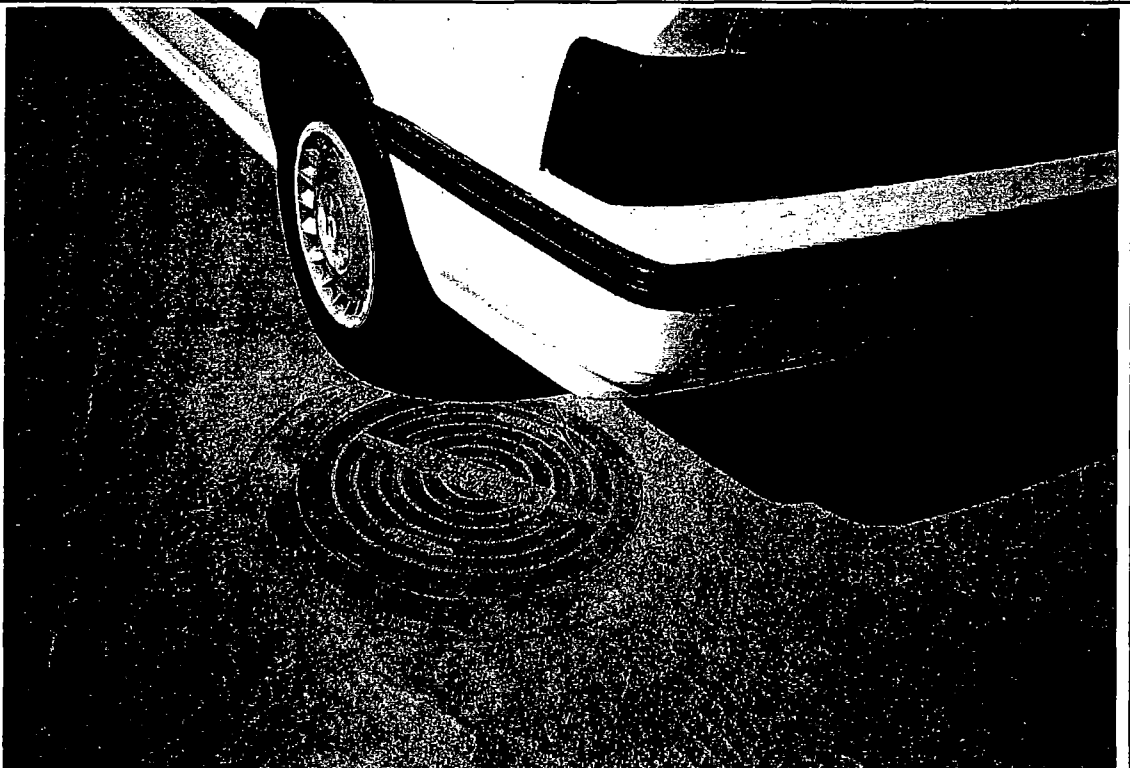
Date:
11-22-02

**Direction Photo
Taken:**

Along cap.

Description:

Photo shows typical
condition of manholes in
southeast area.





SITE PHOTOGRAPHS

Project Name/ Client:
South Cavalcade Long-Term O&M
Annual Report

Site Location:
South Cavalcade

URS 18804-431-012

Photo No.
15

Date:
11-22-02

**Direction Photo
Taken:**

Towards joint.

Description:

Photo shows typical joints
of concrete cap. Some
minor spalling has
occurred at joints.
Spalling pattern is typical
of concrete construction.



Photo No.
16

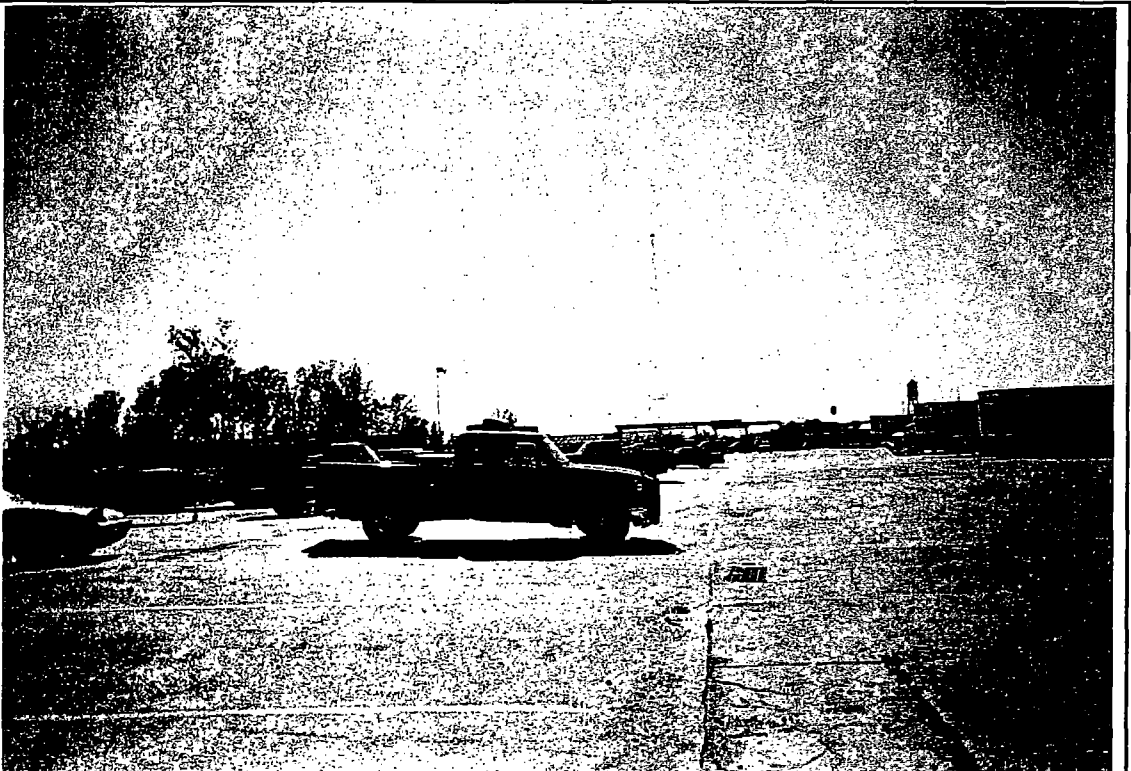
Date:
11-22-02

**Direction Photo
Taken:**

Towards the south.

Description:

Photo taken along existing
pavement edge with
concrete cap. Typical use
of cap in southeast area
for parking is shown.





SITE PHOTOGRAPHS

Project Name/ Client:
South Cavalcade Long-Term O&M
Annual Report

Site Location:
South Cavalcade

URS 18804-431-012

Photo No.
17

Date:
11-22-02

**Direction Photo
Taken:**

Towards the east.

Description:

Similar to photo 16.
Shows concrete cap in
southeast area. Photo is
taken from the northern
end of basin 1.



Photo No.
18

Date:
11-22-02

**Direction Photo
Taken:**

Towards the south.

Description:

Photo shows slope
pavement that connects to
concrete cap at the
northern end of concrete
cap in the southeast area.





SITE PHOTOGRAPHS

Project Name/ Client:
South Cavalcade Long-Term O&M
Annual Report

Site Location:
South Cavalcade

URS 18804-431-012

Photo No.
19

Date:
11-22-02

Direction Photo Taken:

Towards the east.

Description:

Photo taken on the concrete cap in the southwest area. Photo shows protective bollards in the northeast corner of cap.

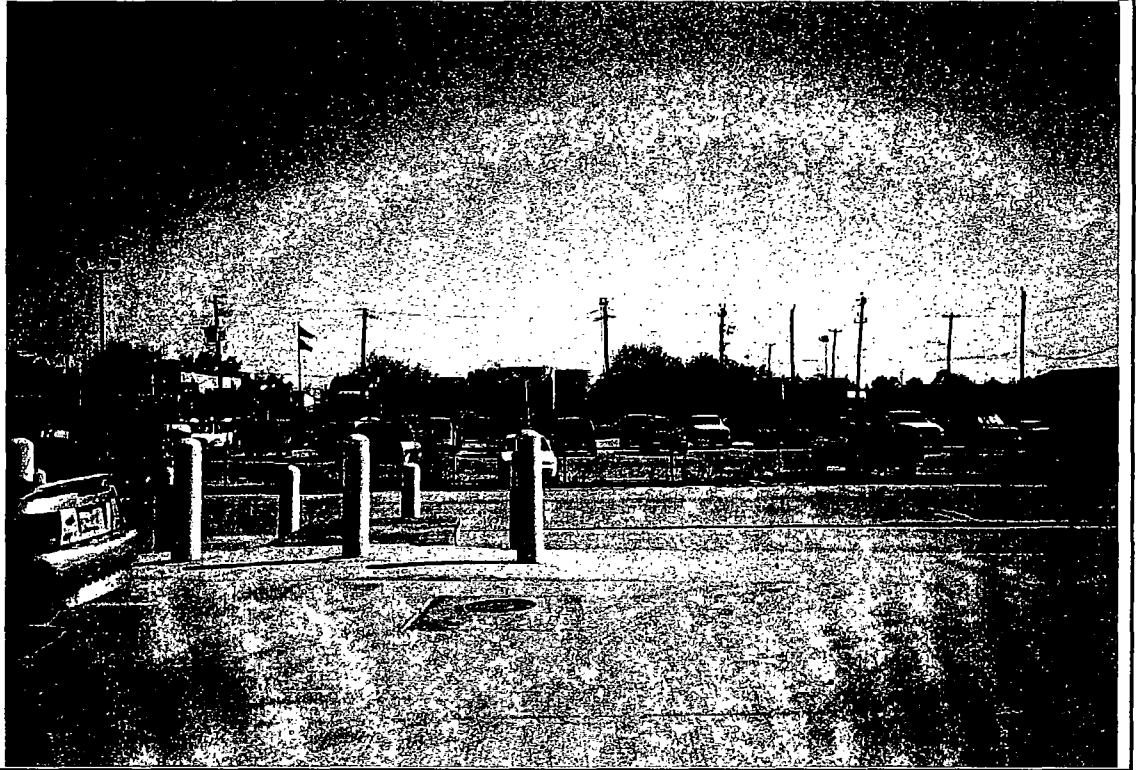


Photo No.
20

Date:
11-22-02

Direction Photo Taken:

Towards the north.

Description:

Photo shows cracking along the edge of concrete cap towards stormwater inlet. Crack is along the concrete cap and is a typical of an contraction crack that occurred during curing.





SITE PHOTOGRAPHS

Project Name/ Client:
South Cavalcade Long-Term O&M
Annual Report

Site Location:
South Cavalcade

URS 18804-431-012

Photo No.
21

Date:
11-22-02

**Direction Photo
Taken:**

Towards the north.

Description:

Photo taken along the
southern edge of concrete
cap in the southwest area.
Joint is in good condition.

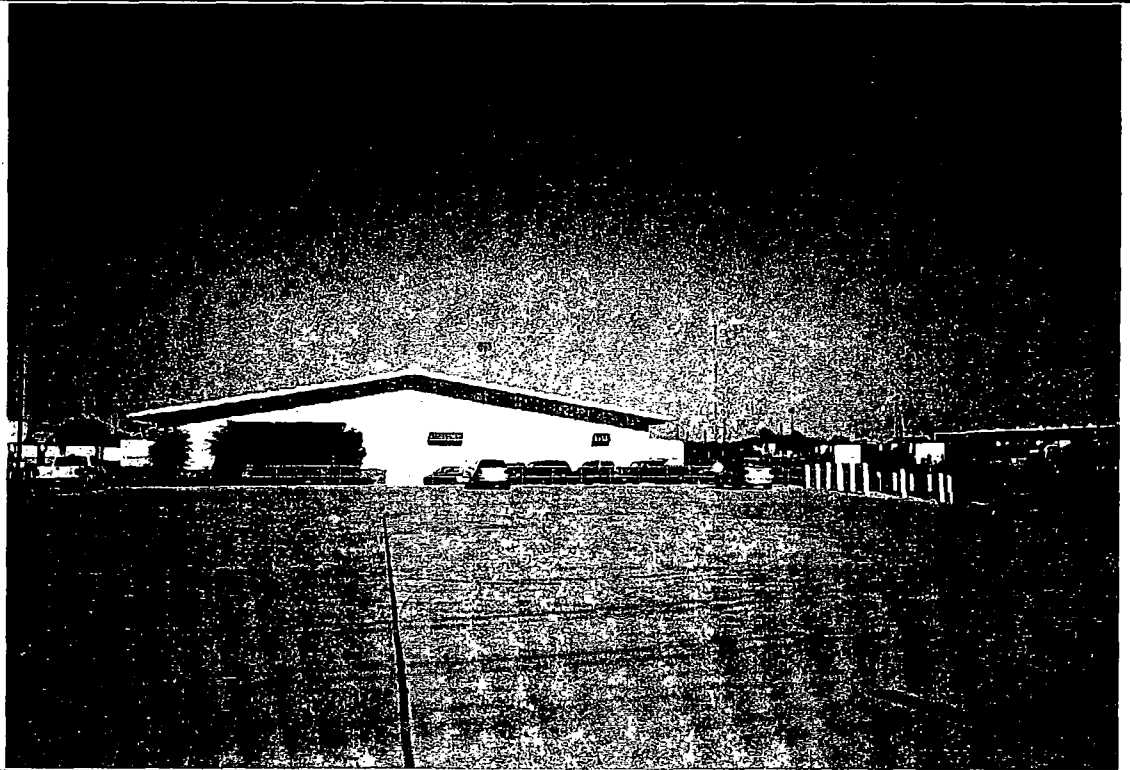


Photo No.
22

Date:
11-22-02

**Direction Photo
Taken:**

Towards the east.

Description:

Photo taken along the
southern edge of concrete
cap in the southwest area.

